

EPA United States Environmental Protection Agency Washington, DC 20460 Work Assignment						Work Assignment Number 1-13				
						<input type="checkbox"/> Other <input type="checkbox"/> Amendment Number:				
Contract Number EP-W-12-013			Contract Period 04/30/2012 To 04/29/2014 Base Option Period Number 1			Title of Work Assignment/SF Site Name Tech/Editorial Support fo CCR				
Contractor INDUSTRIAL ECONOMICS, INCORPORATED					Specify Section and paragraph of Contract SOW					
Purpose: <input checked="" type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval						Period of Performance From 04/30/2013 To 04/29/2014				
Comments: This action initiates WA 1-13, titled "Technical/EditorialSupport for Coal Combustion Rsidual Beneficial Use Evaluation Document" with a LOE of 240 hours. Jason Mills is appointed as the WAM under this work assignment; Taetaye Shimeles is appointed as the Alt. WAM. The SOW is attached. The contractor shall submit a work plan/cost estimate.										
<input type="checkbox"/> Superfund Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund										
Note: To report additional accounting and appropriations date use EPA Form 1900-69A.										
SFO 22 (Max 2)										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:		LOE:						
04/30/2012 To 04/29/2014				0						
This Action:				240						
Total:				240						
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:		LOE:				
Cumulative Approved:				Cost/Fee:		LOE:				
Work Assignment Manager Name Jason Mills						Branch/Mail Code:				
_____ (Signature) (Date)						Phone Number				
						FAX Number:				
Project Officer Name Shannon Sturgeon						Branch/Mail Code:				
_____ (Signature) (Date)						Phone Number: 703-605-0509				
						FAX Number: 703-308-7903				
Other Agency Official Name Lee Hofmann						Branch/Mail Code:				
_____ (Signature) (Date)						Phone Number: 703-308-8479				
						FAX Number:				
Contracting Official Name Christie Deskiewicz						Branch/Mail Code:				
_____ (Signature) (Date)						Phone Number: 202-564-3316				
						FAX Number:				

07-09-2013

Statement of Work

Work Assignment Number: 1-13

Work Assignment Amendment Number: 0

Work Assignment Title: Technical/Editorial Support for Coal Combustion Residual
Beneficial Use Evaluation Document

Work Assignment Manager (WAM): Jason Mills

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(703) 308-7903 (FAX)

Alternate WAM: Taetaye Shimeles

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Email: shimeles.taetaye@epa.gov
Telephone: (703) 308-8729

I. BACKGROUND

The U.S. Environmental Protection Agency (“EPA” or “the Agency”) Sustainable Materials Management (SMM) Program supports the use/reuse of resources productively and sustainably throughout their life cycles, from the point of resource acquisition through disposal. The SMM Program seeks to avoid or minimize impacts to the environment while accounting for economic efficiency and societal considerations. The beneficial use of Coal Combustion Residuals (CCRs), when done in a manner protective of human health and the environment, can advance the goals of the SMM Program. As part of this effort, the EPA’s Office of Resources Conservation and Recovery (ORCR) has conducted the beneficial use evaluation of selected encapsulated products containing CCRs to determine whether these beneficial use products are comparable to analogous products made without CCRs (virgin raw material), or are otherwise equally acceptable, during use by the consumer. As a result of this evaluation, ORCR has produced a document, detailing the evaluation process, as well as the findings and conclusions of this beneficial use evaluation.

II. PURPOSE

The purpose of this work assignment is to obtain technical and editorial support for the document: *Coal Combustion Residual Beneficial Use Evaluation: Fly Ash Concrete and FGD Gypsum Wallboard*.

III. SCOPE OF WORK

Task 1: Work Plan Development

Prior to start of work, the WAM will provide the document as four separate .docx file(s) (main text and three appendices). The contractor may review this document to assist with the development of the work plan. This size and scope of this document is similar to a previous draft edited under Contract EP-W-07-011, Work Assignment 4-30, Technical Directive 4. Within 20 business days of the receipt of this work assignment and the four files, the contractor shall deliver a work plan detailing the following for each task outlined in this assignment:

1. A detailed plan for completing each subtask;
2. Levels and mix of work hours needed, along with names of all proposed personnel;
3. A complete schedule of work and outputs, along with deliverable dates;
4. A complete budget that includes labor hours for each task by each individual, along with their professional level, and all additional costs anticipated for the work assignment;
5. whether any potential conflicts of interest that may exist for any part of the work; and
6. Any other items specified in this work assignment.

The contractor may contact the WAM before submitting the work plan for any clarification regarding the scope of the work assignment. Upon approval of the work plan, the contractor shall prepare and deliver a monthly invoice, in conformance with the requirements of the contract, which details the project status and remaining funds.

Task 2: Technical and Editorial Support

Subtask 2a: Document Unification

The contractor shall combine the main text and appendices into one unified document. Upon completion, the document should be a single .docx file with a single table of contents that encompasses the entire document. If the formatting of the document makes it too complicated to unify the entire document, the contractor will notify the WAM prior to submission of the work plan. The WAM will provide guidance on how to proceed.

Subtask 2b: Text Revisions

The contractor shall review the document to ensure that grammar, spelling, citations and formatting are appropriate and consistent. Where errors or inconsistencies are identified, changes will be made in redline strikeout. However, if a change requires any appreciable reworking of the text, the contractor will instead flag the text with a comment bubble. In these comment bubbles, the contractor will briefly summarize both the perceived issue and the recommended edits. The purpose of these comment bubbles is to avoid excessive expenditure of time on edits that may be unwanted for reasons such as prior agreements on phrasing. Specifically, the contractor shall review the document and ensure that:

- technical discussions included in the report are sufficiently clear and appropriate for the primary audience of state, tribe and local regulators and the regulated community;
- all abbreviations presented in the document are defined at first use and included in the front table. Any abbreviation not used at least once beyond the original definition should be deleted;
- weblinks throughout the text and references are functional and link to the proper websites;
- references at the end of the main text and appendices are complete, appropriately cited and accurate;
- all grammar, punctuation, spelling and citations conform to guidelines set forth in: <http://www2.epa.gov/stylebook>.
- section headers, tables, figures and equations throughout the document are properly referenced in the body of the text and linked in the table of contents;
- pagination is consistent throughout the document, corresponds to the appropriate section of the document, and is suitable for both web-based and printed viewing. Blank pages should be inserted between different sections and appendices with the text, “[This Page

Intentionally Left Blank],” to ensure that the text can be physically separated into discrete sections when printed;

- formatting for text, heading, line spacing, paragraph spacing, paragraph alignment (justification), breaks (section and page) and tables are consistent throughout the document. Any fonts used by the contractor should be from the standard Microsoft Word library;
- text, tables or figures do not break awkwardly across multiple pages. The contractor may adjust document formatting within reason to ensure that this does not occur; and
- document formatting does not change when the file is closed and reopened.

Subtask 2c: Figure Revisions

The document main text and appendices contain a total of 15 figures drafted by EPA staff. While these figures present the desired information, the Agency feels they do not look refined enough for the purposes of this document. Nine of these figures are simple Microsoft Excel graphs located in Chapter 2 of the document. EPA is requesting input on how these graphs and the accompanying tables can be better presented to enhance the readability of the document. An additional three figures in Chapter 3 were designed using Microsoft Word, and are anticipated to require minimal edits. The remaining three figures (Chapter 0 and Appendix C) were designed using Microsoft Power Point. Due to the greater complexity of these final three images, they are believed to require the greatest work.

Prior to the start of work, the WAM will provide a set of marked up figures in addition to those in the document to highlight any specific details that should be considered during the revisions. Any software program may be used to conduct this work (including the Microsoft Office Suite), as long as the software is readily available to the contractor, the work can be completed in the time allotted, and the finished product looks sufficiently polished. If any technical errors are identified in the figures during revisions, the contractor will notify the WAM prior to submission of the draft document. The WAM will review the suggested edits and provide guidance on how to proceed.

Deliverables

The contractor shall deliver a draft of the unified document in .docx format containing all edits in redline strikeout, proposed edits in comment bubbles, and revised figures no later than 10 business days after finalizing the work plan. The WAM will review the draft document and provide comments, as well as direction on how to address any proposed edits.

The contractor shall revise the document based on the WAM’s comments, and deliver both a redline and clean finalized document in .docx format no later than 5 business days after receipt of the comments. The WAM will also deliver a PDF of the same clean finalized document to demonstrate that no formatting issues arise during the conversion.

IV. OTHER CONTRACTOR REQUIREMENTS

Under this work assignment, the contractor shall: (1) Communicate with the WAM and Alt-WAM, at minimum, on a weekly basis through email regarding the status of the work assignment, any issues or questions that may arise, and any unplanned events that may result in an increased expenditure of funds. More frequent communication by email or phone may be established on an as needed basis. (2) Provide all deliverables electronically, with draft deliverables in .docx format and final deliverables in both .docx and .pdf format.

V. SCHEDULE AND DELIVERABLES

Deliverables	Due Date
Task 1. Work Plan Development	
Work Plan and Budget	20 business days after receipt of the work assignment.
Task 2. Technical and Editorial Support	
Redline Draft Document (.docx)	10 business days after finalization of the work plan.
Redline and Clean Final Document (.docx and .pdf)	5 business days after receipt of WAM comments.

<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> <h1 style="margin: 0;">EPA</h1> </div> <div style="text-align: center;"> <p>United States Environmental Protection Agency Washington, DC 20460</p> <h2 style="margin: 0;">Work Assignment</h2> </div> </div>		<p>Work Assignment Number 1-13</p> <p><input type="checkbox"/> Other <input checked="" type="checkbox"/> Amendment Number: 000001</p>								
<p>Contract Number EP-W-12-013</p>	<p>Contract Period 04/30/2012 To 04/29/2014</p> <p>Base <input checked="" type="checkbox"/> Option Period Number</p>	<p>Title of Work Assignment/SF Site Name Technical/Editorial Support</p>								
<p>Contractor INDUSTRIAL ECONOMICS, INCORPORATED</p>		<p>Specify Section and paragraph of Contract SOW</p>								
<p>Purpose:</p> <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p><input type="checkbox"/> Work Assignment</p> <p><input checked="" type="checkbox"/> Work Assignment Amendment</p> <p><input type="checkbox"/> Work Plan Approval</p> </div> <div style="width: 45%;"> <p><input type="checkbox"/> Work Assignment Close-Out</p> <p><input type="checkbox"/> Incremental Funding</p> </div> </div>		<p>Period of Performance</p> <p>From 04/30/2013 To 04/29/2014</p>								
<p>Comments:</p> <p>The purpose of this amendment is to approve the contractor's work plan/cost estimate dated 7/30/13 with a LOE of 240 hours and \$22,366.21 (b)(4) cost (b)(4) fee).</p>										
<p><input type="checkbox"/> Superfund Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund</p>										
<p>SFO 22 Note: To report additional accounting and appropriations date use EPA Form 1900-69A.</p>										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
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5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:		LOE:						
04/30/2012 To 04/29/2014				240						
This Action:				0						
Total:				240						
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:		LOE:				
Cumulative Approved:				Cost/Fee:		LOE:				
<p>Work Assignment Manager Name Jason Mills</p> <p>_____</p> <p style="text-align: center;">(Signature) (Date)</p>						<p>Branch/Mail Code:</p> <p>Phone Number</p> <p>FAX Number:</p>				
<p>Project Officer Name Shannon Sturgeon</p> <p>_____</p> <p style="text-align: center;">(Signature) (Date)</p>						<p>Branch/Mail Code:</p> <p>Phone Number: 703-605-0509</p> <p>FAX Number: 703-308-7903</p>				
<p>Other Agency Official Name</p> <p>_____</p> <p style="text-align: center;">(Signature) (Date)</p>						<p>Branch/Mail Code:</p> <p>Phone Number:</p> <p>FAX Number:</p>				
<p>Contracting Official Name Christie Deskiewicz</p> <p>_____</p> <p style="text-align: center;">(Signature) (Date)</p>						<p>Branch/Mail Code:</p> <p>Phone Number: 202-564-3316</p> <p>FAX Number:</p>				

EPA United States Environmental Protection Agency Washington, DC 20460 Work Assignment						Work Assignment Number 1-14				
						<input type="checkbox"/> Other <input type="checkbox"/> Amendment Number:				
Contract Number EP-W-12-013			Contract Period 04/30/2012 To 04/29/2014 Base Option Period Number 1			Title of Work Assignment/SF Site Name Econ Sppt for Financial Assura				
Contractor INDUSTRIAL ECONOMICS, INCORPORATED					Specify Section and paragraph of Contract SOW					
Purpose: <input checked="" type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval						Period of Performance From 04/30/2013 To 04/29/2014				
Comments: The purpose of this action is to initiate WA 1-14 with a LOE of 640 hours. The statement of work is attached. Scott Palmer is appointed as the WAM. Becky Cuthbertson is appointed as the Alt. WAM. The contractor shall submit a work plan/cost estimate.										
<input checked="" type="checkbox"/> Superfund Accounting and Appropriations Data <input type="checkbox"/> Non-Superfund										
Note: To report additional accounting and appropriations data use EPA Form 1900-69A.										
SFO 22 (Max 2)										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:				LOE: 0				
04/30/2012 To 04/29/2014										
This Action:						640				
Total:						640				
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:		LOE:				
Cumulative Approved:				Cost/Fee:		LOE:				
Work Assignment Manager Name Scott Palmer <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>						Branch/Mail Code: Phone Number 703-308-8621 FAX Number:				
Project Officer Name Shannon Sturgeon <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>						Branch/Mail Code: Phone Number: 703-605-0509 FAX Number: 703-308-7903				
Other Agency Official Name <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>						Branch/Mail Code: Phone Number: FAX Number:				
Contracting Official Name Christie Deskiewicz <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>						Branch/Mail Code: Phone Number: 202-564-3316 FAX Number:				

Statement of Work
Work Assignment No. 1-14
EPA Contract #: EP-W-12-013

1. **TITLE:** CERCLA 108(b) – Economics Support for Financial Assurance Rulemaking

2. **PERIOD OF PERFORMANCE:** Date of CO signature through 6/1/2014

3. **WORK ASSIGNMENT MANAGER:** **Scott Palmer**
Economics and Risk Analysis Staff
Office of Resource Conservation & Recovery

Mailing Address:
US Environmental Protection Agency
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Washington, DC 20460

Phone: 703-308-8621
E-mail: palmer.scott@epa.gov

Alt WAM: **Becky Cuthbertson**
Economics and Risk Analysis Staff
Office of Resource Conservation & Recovery

Mailing Address: Same as above
Phone: 703-308-8447
E-mail: cuthbertson.becky@epa.gov

4. **BREIF BACKGROUND ON PROJECT AND PRIOR CONTRACT SUPPORT:**

USEPA has been involved in significant ongoing analyses to assess the need to promulgate financial assurance regulations under CERCLA, 108(b). Substantial prior work has already been completed under former Work Assignments (WA's) with Industrial Economics (IEc). This work has been conducted on an ongoing basis up until earlier in 2013, when all remaining work and hours under WA #B-7 were halted.

Specific tasks that have already been conducted are thoroughly outlined in the Scopes of Work and Approved IEc Work Plans for WA #B-7 of this contract, as well as all other prior WA's associated with the CERCLA 108(b) Rulemaking.

5. **STATEMENT OF WORK FOR WA #B-???:**

This WA is being utilized to reinitiate necessary economic analyses for the CERCLA 108(b) regulatory development process. Specific of these include high priority components of work and analyses that are needed up front in the critical path in order to make continued longer-term progress on the formulation of this rulemaking.

[Note: These analyses of immediate need however, represent typical contractor support services pertaining to regulatory impact analyses (RIA) necessary for rule writing and promulgation. As such, amendments may be added to this work assignment in order to continue and/or add similar types of contract services which may be needed on an ongoing basis over the duration of this rulemaking.]

Task 1: Work Plan and Budget Management

Within 20 calendar days of the receipt of the approved work assignment, the contractor shall deliver a work plan including a proposed level of effort by subtask, budget, and schedule of tasks through the term of performance. If there are any questions regarding the work plan, please contact the EPA WAM (and/or the Alternate WAM). The contractor shall maintain at least weekly communication with the EPA WAM and Alternate WAM in order to share any anticipated events which may cause an accelerated expenditure of approved funds for the period, and provide a monthly progress report regarding the status of work on the work assignment. The contractor shall also provide management oversight of the work assignment throughout its entire period of performance.

In addition, the contractor shall provide a brief description (a sentence or two) in the monthly progress reports of the data-quality issues and activities achieved throughout the work assignment.

Task 2: Review and Modification of all Prior Economic Data Collection, Analyses, and Results

A priority for further analyses is to solicit review and concurrence from OSWER's Office of Superfund Remediation and Technology Innovation (OSRTI) on the economics related data collection, analyses, methodologies, statistics, and findings achieved to date. OSRTI has made a commitment to increase the amount of staff resources necessary to meet this need. As such, this task calls for contract support in briefing OSRTI on the results to date, and to field any inquiries or comments made by OSRTI. IEC should plan on a minimum of one face to face meeting with OSRTI, as an initial introduction to the full breadth of analyses conducted to date.

Based on input from OSRTI, modifications to prior analyses may be necessary. If so, such changes and/or updates shall also be conducted under Task 2. The contractor should assume that they will need to be available to field questions about their chosen assumptions, methods, and findings covering a broad amount of the work conducted to date. Any responses shall be prepared by the contractor and provided to the WAM for distribution to OSRTI. We would ask that the pertinent contractor staff persons also make themselves available by phone in order to more readily facilitate resolution of such inquiries.

The total amount of time and workload necessary for responding to questions and comments as well as subsequent modifications to prior analyses should be assumed to not exceed more than 50% of the overall allotted LOE estimated for this WA.

Task 3: Draft Assessment of Economic and Regulatory Impacts of the Proposed Rulemaking

Under this task, work to be conducted by the contractor shall first include a reassessment of the current understanding of established key features of the Rule Requirements (as well as critical gaps and remaining rule features/decisions yet to be resolved). This progress assessment of the rule shall be

accompanied by recommendations at to the next most critical aspects of analyses necessary to arrive at improved projections of the amounts of FA that will be required under the rule. This will be used to direct future work assignments and establish better estimates of the costs (and benefits of the rule), relative to the options being considered. Such work may also include the following analyses, as previously identified under WA #B-7.

- 1) Selection of Fixed Financial Assurance amounts that can be used for a Fixed FA Option under the rule. An approach and supporting arguments are to be established in cooperation with the Agency, for the selection of Fixed FA amounts, on the basis of commodity categories currently being identified by EPA. It is assumed that the selection of such amounts are to be based on Historic Response Cost estimates and Existing FA data, as well as associated findings from Statistical Regressions that have already been (or are concurrently being) collected/conducted.
- 2) Formulation of an approach and supporting arguments are also to be established in cooperation with the Agency, for the selection of candidate approaches that would allow for “Adjustments” to the Fixed FA targets. Such an approach would be used to allow Fixed FA amounts to be tailored to accommodate for specific site features/characteristics, thereby allowing a more equitable amount to be established for certain facilities. For example, such a scheme could thereby allow for higher vs. lower adjusted FA amounts at facilities depending upon whether their respective site characteristics are or are not shown to be correlated with higher liability risks and response costs. Such an approach will require the identification of variables shown to be correlated with historical response cost estimates and existing FA amounts, as well as other potential dependent variables. Such adjustments are likely to be based on geologic, geographic, and/or process/management characteristics at any given facility (e.g. adjustments allowed for variations in disturbed acreage and proximity to surface water, etc... across facilities features). As such, independent variables of interest include, but are not limited to, Disturbed Acreage, Depth to Groundwater, Distance to Surface Water, Type of Commodity, On-site Processes (heap leach / no heap leach...), Pro-environmental Management Traits (ISO certification, ...), etc.
- 3) Derivation of draft estimates of the costs attributable to the FA amounts identified above. The costs of attaining FA are to be estimated by utilizing the amounts from 1) and 2) above, along with all data and analytical findings developed to date (e.g. Hist. Resp. Cost estimates, Cost of Mechanisms, Regression findings, Existing FA amounts already in place, Identified HRM Facilities to be Regulated universe and their respective financial data, Cost of Financial Instruments, Discounting Findings, etc.).
- 4) Assembling preliminary draft estimates of the monetary costs (and potential tradeoffs and benefits) associated with all alternative Financial Assurance mechanisms being considered, so that a Draft Economic Impact Analysis of the costs and benefits of the can be prepared in time to be available for in time for commencement of the SBA Review (SBAR Panel) Process related to the Regulatory Flexibility analyses for the rule (currently projected to commence no earlier than 3/1/12). [Notes: Such dates are projected and may therefore change. Furthermore, improved cost estimates will likely need to be further developed, following ongoing refinement of the final financial assurance requirements to be chosen for the rule.]
- 5) Drawing on Industry Profiles and additional firm level data (including sales, revenues, number of employees, etc.), the contractor shall also conduct an analysis of “small entity”

impacts associated with the proposed rule, in support of the necessary Reg. Flex. analysis and potential convening of SBAR Panel.

[NOTE: Much of the work to be conducted under Task 3 will be dependent upon the results of concurrent tasks and analyses that may still be underway. Therefore, portions of the work under Task 3 may also need to wait to begin until after EPA is able to issue a Technical Directive to the contractor with this information.]

6. OVERALL SCHEDULE FOR DELIVERABLES

Task and Deliverable for WA # 4-41	Estimated Delivery
<u>Task 1 – Workplan and Budget Management</u> Deliverable 1: Workplan and Budget	20 days after receipt of the approved work assignment.
<u>Task 2: Review & Modification of Prior Economic Analyses</u> <u>Deliverable 2A: Support of Review & Response to Comments by OSRTI</u> <u>Deliverable 2B: Requested Modifications to Respective Econ Analyses</u>	ongoing (w/ Monthly Progress Report updates) within 30 days of final comments per analyses (hist. response costs, regression analyses, etc...)
<u>Task 3 – Regulatory Impact Analyses related work</u> <u>Deliverable 3A: Progress Assessment and Next Steps</u> <u>Other Analyses as possible</u> <u>Deliverable 3A: Selection of Preliminary Fixed FA Amounts (by Commodity and/or Commodity Group)</u> <u>Deliverable 3B: Selection of Options for Fixed FA Adjustments</u> <u>Deliverable 3C: Draft Estimates of the Costs of selected Financial Assurance amounts (including cost of instruments and necessary collateral, etc...)</u> <u>Deliverable 3D: Draft RIA Analyses - estimates of comprehensive cost impacts of the rule in accordance with Exec. Order 12866 (including any Site Specific Assessment costs, Benefit estimates, etc.)</u> <u>Deliverable 3E: Draft SBREFA Analyses and Documentation to Support the SBREFA & SBAR Panel Process</u>	Within 15 days of all above requested analytical modifications, or 15 days after receipt of TD with CO Signature 30 Days after receipt of TD with CO Signature 30 Days after receipt of TD with CO Signature 30 Days after submission of Deliverable 2B 60 Days after submission of Deliverable 2C 30 Days after submission of Deliverable 2D (Note: Ongoing Deadlines to change in accordance with FLM negotiations and the SBAR Panel Process.)

7. OTHER CONTRACTOR REQUIREMENTS

The contractor shall comply with all applicable requirements of the contract, including compliance with all quality-assurance standards, provision of monthly invoices detailing progress and for notifying the WAM of the status of remaining funds, and other such requirements. The contractor must also ensure that the data collected for the characterization of environmental processes and conditions contain the appropriate QA/QC requirements to support the intended use of the data. In addition, the contractor shall make use of the following in developing the appropriate QA/QC requirements: *Guidance for Data Quality Objectives* (EPA QA/G-4), and *Guidance for Quality Assurance Project Plans* (EPA QA/G-5). These documents and others can be found at the following Agency website: <http://www.epa.gov/quality/qs-docs/>. Furthermore, all data and supporting documents used in the performance of this contract and all associated analyses shall be provided to EPA at the completion of the work, as well as at any such time that it is requested by the WAM or Alt. WAM.

EPAUnited States Environmental Protection Agency
Washington, DC 20460**Work Assignment**

Work Assignment Number

1-14

☐ Other ☒ Amendment Number:

000001

Contract Number

EP-W-12-013

Contract Period 04/30/2012 To 04/29/2014

Base

Option Period Number 1

Title of Work Assignment/SF Site Name

CERCLA 108(b) - Econ Support

Contractor

INDUSTRIAL ECONOMICS, INCORPORATED

Specify Section and paragraph of Contract SOW

Purpose:

☐

Work Assignment

☐

Work Assignment Close-Out

☒

Work Assignment Amendment

☐

Incremental Funding

☒

Work Plan Approval

Period of Performance

From 04/30/2013 To 04/29/2014

Comments:

The purpose of this amendment is to approve the contractor's work plan/cost estimate dated Oct 23 2013 with cost (b)(4) fee (b)(4) totaling \$44,855.30 and professional LOE of 407 Hours. The Contractor is not authorized to go over the cost ceiling without approval prior from the Contracting Officer.

☒

Superfund

Accounting and Appropriations Data

☐

Non-Superfund

SFO
(Max 2)

22

Note: To report additional accounting and appropriations data use EPA Form 1900-69A.

Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
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3										
4										
5										

Authorized Work Assignment Ceiling

Contract Period 04/30/2012 To 04/29/2014 Cost/Fee: \$0.00 LOE: 0

This Action: \$44,855.30 407

Total \$44,855.30 407

Work Plan / Cost Estimate Approvals

Contractor WP Dated 10/23/2013 Cost/Fee: \$44,855.30 LOE: 407

Cumulative Approved Cost/Fee: \$44,855.30 LOE: 407

Work Assignment Manager Name Scott Palmer

Branch/Mail Code:

Phone Number 703-308-8621

FAX Number:

(Signature)

(Date)

Project Officer Name Shannon Sturgeon

Branch/Mail Code:

Phone Number: 703-605-0509

FAX Number: 703-308-7903

(Signature)

(Date)

Other Agency Official Name

Branch/Mail Code:

Phone Number:

(Signature)

(Date)

Contracting Official Name

Kulvis Rocque

Branch/Mail Code:

Phone Number: 202-564-8316

(Signature)

(Date) 11/7/2013

FAX Number:

EPA United States Environmental Protection Agency Washington, DC 20460 Work Assignment						Work Assignment Number 1-14				
						<input type="checkbox"/> Other <input checked="" type="checkbox"/> Amendment Number: 000002				
Contract Number EP-W-12-013			Contract Period 04/30/2012 To 04/29/2014			Title of Work Assignment/SF Site Name				
			Base Option Period Number 1			Descope of WA1-14 - CERCLA108b				
Contractor INDUSTRIAL ECONOMICS, INCORPORATED					Specify Section and paragraph of Contract SOW					
Purpose: <input type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input checked="" type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval					Period of Performance From 04/30/2013 To 04/29/2014					
Comments: The purpose of this amendment is to de-scope/ reduce originally approved LOE of 407 on WA 1-14 by 217 hours. New total LOE for this work assignment is 190. The contractor shall submit a revise work plan/cost estimate to reflect reduction.										
<input checked="" type="checkbox"/> Superfund Accounting and Appropriations Data <input type="checkbox"/> Non-Superfund										
Note: To report additional accounting and appropriations data use EPA Form 1900-69A.										
SFO 22 (Max 2)										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:		LOE: 407						
04/30/2012 To 04/29/2014										
This Action:				-217						
Total:				190						
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:			LOE:			
Cumulative Approved:				Cost/Fee:			LOE:			
Work Assignment Manager Name Scott Palmer							Branch/Mail Code:			
_____ (Signature) (Date)							Phone Number 703-308-8621			
							FAX Number:			
Project Officer Name Shannon Sturgeon							Branch/Mail Code:			
_____ (Signature) (Date)							Phone Number: 703-605-0509			
							FAX Number: 703-308-7903			
Other Agency Official Name							Branch/Mail Code:			
_____ (Signature) (Date)							Phone Number:			
							FAX Number:			
Contracting Official Name Eulvid Rocque							Branch/Mail Code:			
_____ (Signature) (Date)							Phone Number: 202-564-8316			
							FAX Number:			

Statement of Work
Work Assignment No. 1-14
Amendment #1
EPA Contract #: EP-W-12-013

1. **TITLE:** CERCLA 108(b) – Economics Support for Financial Assurance Rulemaking

2. **PERIOD OF PERFORMANCE:** Date of CO signature through 6/1/2014

3. **WORK ASSIGNMENT MANAGER:** **Scott Palmer**
Economics and Risk Analysis Staff
Office of Resource Conservation & Recovery

Mailing Address:
US Environmental Protection Agency
MC 5305-P
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Phone: 703-308-8621
E-mail: palmer.scott@epa.gov

Alt WAM:

Becky Cuthbertson
Economics and Risk Analysis Staff
Office of Resource Conservation & Recovery

Mailing Address: Same as above
Phone: 703-308-8447
E-mail: cuthbertson.becky@epa.gov

4. **BREIF BACKGROUND ON PROJECT AND PRIOR CONTRACT SUPPORT:**

USEPA has been involved in significant ongoing analyses to assess options for the promulgation of financial assurance regulations under CERCLA, 108(b). Substantial prior work has already been completed under former Work Assignments (WA's) with Industrial Economics (IEc) and other contract vehicles in place within the Office of Resource Conservation and Recovery (ORCR). The work by IEc on this rulemaking has been conducted on an ongoing basis for several years, but was halted earlier in 2013, due to budget constraints.

Upon the availability of funding for this work, a new WA #1-14 was put in place later in 2013. WA #1-14 reinitiates necessary economic analyses for the CERCLA 108(b) regulatory development process that were previously halted under WA #B-7. The scope for WA #1-14 includes high priority components of analyses that are needed, both in the near term, as well for longer-term progress on the formulation of this rulemaking.

[Note: For an explanation of the tasks already commenced or conducted to date, consult the original Scopes of Work and Approved IEc Work Plans for WA #B-7 and other prior WA's associated with the CERCLA 108(b) Rulemaking.]

5. STATEMENT OF DESCOPE FOR AMENDMENT #1 TO WA #1-14:

However, numerous unforeseen administrative and technical complexities have caused unavoidable delays in the schedule for the CERCLA 108b Rulemaking. This in turn has had a negative impact on the progress of the subject analyses called for under WA #1-14, and the level of LOE needed to date has lagged significantly from that originally anticipated.

In addition, our office has been requested to identify components of our overall work that can be descope at this time, in order to free up capacity so that the contract (EP-W-12-013) can be used to accommodate those specific analyses that are needed on a shorter timeline. with IEc Because these delays have impeded progress from being made on some components of the subject analyses, a portion of the work under WA #1-14 is to be suspended and associate hours de-scoped. Task #3 of the approved work plan is not to be conducted at this time.

As such, this Amendment calls for a descope of WA #1-14 and the withdrawal of all LOE for Task #3 of WA #1-14. Task #3 requests that the contractor to prepare a "Draft Assessment of Economic and Regulatory Impacts of the Proposed Rulemaking", as well as conduct longer-term draft regulatory impact analyses for CERCLA 108b. Due to the aforementioned delays, work on Task #3 has not yet begun and shall be temporarily halted at this time. Removing the 217 hours of LOE allocated to Task #3 reduces the overall LOE approved for WA #1-14 from 407 to 190 hours.

[Note: At a later date, when appropriate and feasible, this office plans to fully request contractor assistance in order to conduct the work originally outlined in Task #3 of WA #1-14.]

EPA United States Environmental Protection Agency Washington, DC 20460 Work Assignment						Work Assignment Number 1-14				
						<input type="checkbox"/> Other <input checked="" type="checkbox"/> Amendment Number: 000003				
Contract Number EP-W-12-013			Contract Period 04/30/2012 To 04/29/2015 Base <input checked="" type="checkbox"/> Option Period Number			Title of Work Assignment/SF Site Name Econ Support for CERCLA 108b				
Contractor INDUSTRIAL ECONOMICS, INCORPORATED					Specify Section and paragraph of Contract SOW					
Purpose: <input type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input checked="" type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval						Period of Performance From 04/30/2013 To 04/29/2014				
Comments: The purpose of this amendment is to approve the contractor's work plan/cost estimate dated 03/24/2014, with a descope in LOE of 217 hours and reduction in cost of \$22,142.71 (b)(4) cost (b)(4) fee). This descope amendment reduces the cumulative LOE for WA 1-14 to 190 hours and lowers the cost to \$22,712.59 (b)(4) cost (b)(4) fee).										
<input checked="" type="checkbox"/> Superfund Accounting and Appropriations Data <input type="checkbox"/> Non-Superfund										
Note: To report additional accounting and appropriations data use EPA Form 1900-69A.										
SFO 22 (Max 2)										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:		LOE:						
04/30/2012 To 04/29/2015				190						
This Action:				0						
Total:				190						
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:		LOE:				
Cumulative Approved:				Cost/Fee:		LOE:				
Work Assignment Manager Name Scott Palmer <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>						Branch/Mail Code: Phone Number 703-308-8621 FAX Number:				
Project Officer Name Shannon Sturgeon <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>						Branch/Mail Code: Phone Number: 703-605-0509 FAX Number: 703-308-7903				
Other Agency Official Name Lee Hofmann <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>						Branch/Mail Code: Phone Number: 703-308-8479 FAX Number:				
Contracting Official Name Christie Deskiewicz <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>						Branch/Mail Code: Phone Number: 202-564-3316 FAX Number:				

EPA United States Environmental Protection Agency Washington, DC 20460 Work Assignment						Work Assignment Number 1-15				
						<input type="checkbox"/> Other <input type="checkbox"/> Amendment Number:				
Contract Number EP-W-12-013			Contract Period 04/30/2012 To 04/29/2014			Title of Work Assignment/SF Site Name				
			Base Option Period Number 1			1-15 RCRA Prog Benefits Highli				
Contractor INDUSTRIAL ECONOMICS, INCORPORATED					Specify Section and paragraph of Contract SOW					
Purpose: <input checked="" type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval					Period of Performance From 04/27/2013 To 04/29/2014					
Comments: This action initiates WA 1-15 with an LOE of 586 hours. Scott Palmer is appointed as the WAM and Rachel Horton is appointed alt. WAM. The statement of work is attached. The contractor shall provide a work plan/cost estimate.										
<input type="checkbox"/> Superfund Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund										
Note: To report additional accounting and appropriations date use EPA Form 1900-69A.										
SFO 22 (Max 2)										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:				LOE: 0				
04/30/2012 To 04/29/2014										
This Action:						586				
Total:						586				
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:		LOE:				
Cumulative Approved:				Cost/Fee:		LOE:				
Work Assignment Manager Name Scott Palmer						Branch/Mail Code:				
_____ (Signature) (Date)						Phone Number 703-308-8621				
						FAX Number:				
Project Officer Name Shannon Sturgeon						Branch/Mail Code:				
_____ (Signature) (Date)						Phone Number: 703-605-0509				
						FAX Number: 703-308-7903				
Other Agency Official Name						Branch/Mail Code:				
_____ (Signature) (Date)						Phone Number:				
						FAX Number:				
Contracting Official Name Eulvid Rocque						Branch/Mail Code:				
_____ (Signature) (Date)						Phone Number: 202-564-8316				
						FAX Number:				

Statement of Work
Work Assignment No. 1-15
EPA Contract #: EP-W-12-013

1. Title: **Economic Benefits of RCRA Regulatory & Voluntary Programs**
2. Period of Performance: Date of CO signature through 12/31/2014
3. Work Assignment Manager: **Scott Palmer**
Economics and Risk Analysis Staff
Office of Resource Conservation and Recovery

Mailing Address:
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Washington, DC 20460

Phone: 703-308-8621
E-mail: palmer.scott@epa.gov

Alt WAM: Rachel Horton
Phone: 703-305-0894
E-mail: kwan.choyi@epa.gov

4. Background and Scope:

The Office of Resource Conservation and Recovery (ORCR) is responsible for administering and tracking the performance of numerous voluntary initiatives and regulatory programs under its authority. Such programs are primarily focused on the proper management and disposal of municipal and hazardous solid waste. ORCR routinely conducts program impact evaluations and benefit assessments for components of its overall program when possible. .

In 2009, ORCR expanded upon prior efforts in this area and conducted a more systematic analysis of the broad benefits and economic impacts associated with our programs. In addition to capturing the benefits of improvements in waste management, ORCR expanded its examination of the impacts of its materials management programs to include “upstream” life-cycle-based benefits associated with conservation of raw materials, energy savings, and reduced greenhouse gases and other emissions. As part of this effort, Industrial Economics, Incorporated (IEc) assisted ORCR in developing methodologies for more broadly and comprehensively valuing the economic benefits associated with its resource conservation and recovery programs.

The results of this work are documented in a December 14, 2009 Memo from IEc entitled “Proposed Methodologies for Valuing ORCR Impacts”. This memorandum presents a screening-level analysis of potential methodologies that can be used to measure a range of

benefit metrics across the programs examined.¹ For this screening analysis, IEc collected available program outcome data, identified relevant and quantifiable measures of environmental impact, and used average unit values to estimate the value of these environmental impacts. Ultimately, the aim was to more fully capture the net social benefits of EPA programs, accounting for marginal benefits as well as marginal costs. By using average values, the analyses by IEc served to be illustrative of the magnitude of upstream and downstream benefits associated with these programs. Accordingly, the project had three primary aims:

- 1) Perform a basic assessment of the availability of data that can be used to quantify the environmental impacts associated with ORCR programs and policies.
- 2) Develop defensible methodologies for estimating the quantity and value of selected environmental impact metrics.
- 3) Provide preliminary illustrative data on selected benefit metrics for a range of EPA conservation and recovery efforts.

At this juncture, ORCR has an elevated and quick turnaround need to better document and highlight the benefits of its programs. As a consequence, the ORCR Office Director has formed an ORCR/RCRA Benefits Workgroup, comprised of about 12 individuals from across ORCR with specific interests, expertise, and responsibilities in this area. The workgroup has also been given a preliminary target of late January through February for the delivery of preliminary results.

This WA is therefore being requested in support this workgroup effort. This new Work Assignment calls for work similar to that which was conducted by IEc in 2009, yet with a distinctly different focus/objective – one that:

- takes advantage of what we already generally know in terms of available data and outcome measures for characterization, methodologies for estimation, and unit values for conversion, as well as the resulting quantified benefits themselves; and
- translates these into simple, clear, defensible, and compelling evidence that can be readily digested by a wide ranging audience (but particularly by audiences with high level of responsibility for shaping program policies and priorities (such as our AA's Office, the OSWER Budget staff within the Office of the Chief Financial Officer, and Congressional Staffers, etc.)).

To achieve this, we first envision that we would conduct a brief scoping assessment/paper aimed at flushing out the analyses and vehicles by which we would accomplish the above objectives. This will help provide the ORCR/RCRA Benefits Workgroup with a vision of the steps necessary to achieve our mission. The scoping exercise would include recommendations for how to best capture, characterize, and advertize the benefits that jointly stem from our programs.

Unlike the work conducted by IEc in 2009, this effort moves away from the identification of program data and impact modeling techniques necessary for deriving benefit estimates.

¹For purposes of their analysis, IEc used the term "benefit" broadly to refer to a beneficial outcome of a specific program, i.e., energy savings or reduction in harmful pollutants. This differs from the use of the term "benefit" in traditional economic and regulatory analysis, where it refers specifically to "net social benefits."

Instead, the aim is to profile and highlight the benefit estimates themselves. However, we will still want to utilize quantified benefits to the fullest extent possible (whether from EPA or publically available sources). As such, for quantification purposes, we will want to take advantage of the methods and data already outlined in IEC's Memo from Dec. 14, 2009. We would simply revisit these earlier findings to generate updated estimates. Any new outcome measures or modeling tools would only be used in limited instances when readily available and merited.

Additional benefits analyses have also been conducted by EPA subsequent to the 2009 work by IEC. These include some benefits assessments conducted for new rules, as well as two outstanding project papers on the subject of benefits analyses that were developed by ORCR/ERAS interns. Lastly, there was a separate internal effort by select staff within ERAS to generate an outreach document with the basic objective that the current ORCR/RCRA Benefits Workgroup has been charged with. However, this document on its own was deemed to be insufficient for our purposes. But, we have been asked to take advantage of this product to the extent possible as a reference and source of ideas. This companion document is from June of 2012 and is entitled "Resource Conservation in the 21st Century: As Important Today As It Was Yesterday." All such documents shall be provided to the contractor upon approval of a final Work Plan for this Work Assignment.

5. Statement of Work: The contractor shall conduct the following tasks:

Task 1: Work Plan and Budget Management

Within 20 calendar days of the receipt of the approved work assignment, the contractor shall deliver a work plan including a proposed level of effort by subtask, budget, and schedule of tasks through the term of performance. If there are any questions regarding the work plan, please contact the EPA WAM. The contractor shall maintain at least weekly communication with the EPA WAM of any anticipated events which may cause an accelerated expenditure of approved funds for the period, and provide a monthly progress report regarding the status of work on the work assignment. The contractor shall also provide management oversight of the work assignment throughout its entire period of performance.

In addition, the contractor shall provide a brief description (a sentence or two) in the monthly progress reports of the data-quality issues and activities met throughout the work assignment.

Task 2: Scoping Assessment of Economic Benefits of ORCR Programs

The contractor shall conduct a scoping assessment that focuses on our need to compile the breadth of available evidence showing the Benefits associated with ORCR programs. That information deemed most relevant and defensible shall be drawn upon, so that this information can be profiled for public release in a fashion that will be both concise and compelling. This scoping exercise shall also include recommendations for how to best capture, characterize, and advertize the benefits that jointly stem from our programs.

This scoping assessment shall take advantage of all prior relevant work, as provided by the Work Assignment manager. As noted above, this effort moves away from the identification of program data and impact modeling techniques necessary for deriving benefit estimates. Instead, the aim is to profile and highlight the benefit estimates of the programs themselves.

As part of this scoping exercise, the contractor is requested to recommend any new data sources and/or methods that may warrant further research and adoption for this effort (per the recommendations presented in the Next Steps section of IEC's Dec. 14 2009 Memo, as well as those that may have been identified subsequent to the 2009 recommendations).

[Note: Future direction of this workgroup effort will necessarily be influenced by this scoping exercise and may prompt later amendments to other Tasks within this Work Assignment.]

Deliverables for Task 2:

The contractor shall produce two deliverables for Task 2. Deliverable 2A shall be a draft scoping assessment and plan, relative to the available data, benefit estimates, and the aim of developing a mechanism for "getting the word out" about the benefits that stem from ORCR's mission.

Deliverable 2B shall be a revised final plan that lays out which program benefits the contractor deems are readily defensible and should be legitimately publicized by ORCR

Task 3: Estimation of Quantifiable Benefits of ORCR Programs

This task calls for existing data sources, methods, and benefit estimate to determine which may already be satisfactory, and which may warrant updating (based on the availability of new outcome data or methods). The contractor shall also identify any new benefit categories that have here-to-fore not been captured/characterized, so that they may be assessed and included in the final materials should they be deemed as essential to the objectives of this Work Assignment (e.g., capturing the Technical Innovation benefits associated w/ RCRA regulations for example). All new and updated benefits assessed by the contractor are to be utilized as underlying findings to be profiled in any final outreach materials.

[Note: This Task 2 very closely matches the Task 2 scope as request in the Work Assignment (under Contract # EPA Contract #: EP-W-07-011), that was utilized to generate the Dec. 14th, 2009 Benefits Memo referenced above.]

[Please further note that some significant analyses of economic benefits have already been conducted for certain components of the RCC program (e.g., regarding the beneficial reuse of industrial materials, such as CCW, C&D Debris, and Foundry Sands). And, any such prior analyses should be taken advantage of by the contractor where available. Also, additional

relevant analyses and estimates are also available (e.g., baseline Energy & GHG benefits of ORCRs programs), and these analyses/estimates shall be made available to the contractor by the WAM following Work Plan approval.]

Deliverables for Task 3:

Under this Task, the contractor shall prepare a report summarizing the qualitative and quantitative results of their analyses. The deliverable shall consist of one draft and one final document. The draft shall be due to the WAM no later than thirty (30) calendar days following receipt of Work Assignment approval. The deliverable shall contain text, tables, flowcharts, and graphics, as appropriate to enhance presentation clarity. The contractor shall also provide a copy of all supporting electronic files (e.g., Microsoft Excel files) used to generate the results presented in the report. The final document shall address all written WAM comments on the draft and be due to the WAM no later than seven (7) calendar days following contractor receipt of all written WAM comments on the draft.

Task 4: -- Development of Outreach Materials Highlighting the Benefits of ORCR Programs

This task calls for the development of outreach materials designed with the purpose of presenting the above results from Tasks 2 & 3 in a concise, readily understandable, and compelling manor. The aim of such outreach materials is to educate key policy makers and stakeholders about the relevance and critical importance of the work conducted by ORCR.

This Task shall therefore be shaped by the results of Tasks 2 and 3. All Task 2 & 3 deliverables will be reviewed by the ORCR/RCRA Benefits Workgroup and the results of this review process will inform the scope of work required to develop the subject outreach materials. It is too premature at this time to develop a scope for such document without the benefit of the results that come from performing Tasks 2 & 3.

Deliverables for Task 4:

As explained above, it shall be necessary to initiate the work to be conducted Task 4 via a Technical Directive (TD). A TD will be issued at the earliest time possible, once Tasks 2 & 3 have proceeded to point where the workgroup can make sufficient decisions about the desired deliverable for Task 4. Given this uncertainty, the contractor is advised to allocate no more than 25% of the overall FTE target to Task 4

6. Overall Schedule for Deliverables

Task and Deliverable	Estimated Delivery
Task 1 – Workplan and Budget Management Deliverable 1: Workplan and Budget	20 days after receipt of the approved work assignment.
Task 2 – Scoping Assessment Deliverable 2A: Draft Scoping Assessment Deliverable 2B: Final Assessment Report and Plan for Content and Design of Proposed Outreach Materials Economic Benefits Estimates & Outreach Documents Estimates	30 days after CO signature 14 days after WAM comments on Deliverable 2A
Task 3 – Generation of Updated Benefit Estimates Deliverable 3A: Draft Report of Benefit Estimates Deliverable 3B: Final Report of Benefit Estimates	30 days after WA approval. 7 days after receipt of WAM comments
Task 4 -- Development of Outreach Materials Highlighting the Benefits of ORCR Programs Deliverable 4A: Draft of Outreach Material Deliverable 4B: Final Content and Design of Outreach Materials	30 days after receipt of TD by Contractor 7 days after receipt of WAM comments

7.) OTHER CONTRACTOR REQUIREMENTS

The contractor shall comply with all applicable requirements of the contract, including compliance with quality-assurance requirements, providing monthly invoices detailing progress and notifying the WAM of the status of remaining funds, and other requirements. The contractor must also ensure that the data collected for the characterization of environmental processes and conditions contain the appropriate QA/QC requirements to support the intended use of the data. In addition to the contract requirements for QA, documents that can be of use in developing the appropriate QA/QC requirements are: *Guidance for Data Quality Objectives* (EPA QA/G-4), and *Guidance for Quality Assurance Project Plans* (EPA QA/G-5). These documents and others can be found at the following Agency website: <http://www.epa.gov/quality/qs-docs/>.

EPA United States Environmental Protection Agency Washington, DC 20460 Work Assignment						Work Assignment Number 1-15				
						<input type="checkbox"/> Other <input checked="" type="checkbox"/> Amendment Number: 000001				
Contract Number EP-W-12-013			Contract Period 04/30/2012 To 04/29/2014			Title of Work Assignment/SF Site Name				
			Base Option Period Number 1			Econ Benefits of RCRA Program				
Contractor INDUSTRIAL ECONOMICS, INCORPORATED					Specify Section and paragraph of Contract SOW Econ Benefits of RCRA Program					
Purpose: <input type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input checked="" type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval					Period of Performance From 04/27/2013 To 04/29/2014					
Comments: The purpose of this amendment is to approve the contractor's Work Plan/Cost Estimate dated Nov. 7, 2013, with a cost (b)(4) fee (b)(4) \$51,887.07 and LOE of 586 hours. The Contractor is not authorized to go over the cost ceiling without approval prior from the Contracting Officer.										
<input type="checkbox"/> Superfund Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund										
Note: To report additional accounting and appropriations data use EPA Form 1900-69A.										
SFO (Max 2) 22										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:				LOE:		586		
04/30/2012 To 04/29/2014										
This Action:						0				
Total:						586				
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:		LOE:				
Cumulative Approved:				Cost/Fee:		LOE:				
Work Assignment Manager Name Scott Palmer						Branch/Mail Code:				
_____ (Signature) (Date)						Phone Number 703-308-8621				
						FAX Number:				
Project Officer Name Shannon Sturgeon						Branch/Mail Code:				
_____ (Signature) (Date)						Phone Number: 703-605-0509				
						FAX Number: 703-308-7903				
Other Agency Official Name Amy Newman						Branch/Mail Code:				
_____ (Signature) (Date)						Phone Number: 202-566-0723				
						FAX Number:				
Contracting Official Name Eulvid Rocque						Branch/Mail Code:				
_____ (Signature) (Date)						Phone Number: 202-564-8316				
						FAX Number:				

EPA United States Environmental Protection Agency Washington, DC 20460 Work Assignment						Work Assignment Number 1-15				
						<input type="checkbox"/> Other <input checked="" type="checkbox"/> Amendment Number: 000002				
Contract Number EP-W-12-013			Contract Period 04/30/2012 To 04/29/2014			Title of Work Assignment/SF Site Name				
			Base Option Period Number 1			Economic Benefits of RCRA				
Contractor INDUSTRIAL ECONOMICS, INCORPORATED					Specify Section and paragraph of Contract SOW					
Purpose: <input type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input checked="" type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval					Period of Performance From 04/27/2013 To 04/29/2014					
Comments: The purpose of this amendment is to add additional LOE of 153 hours to WA 1-15. The total LOE is now 739. The SOW is attached. The contractor shall submit a work plan/cost estimate.										
<input type="checkbox"/> Superfund Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund										
Note: To report additional accounting and appropriations data use EPA Form 1900-69A.										
SFO 22 (Max 2)										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
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4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:				LOE: 0				
04/30/2012 To 04/29/2014										
This Action:						739				
Total:						739				
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:		LOE:				
Cumulative Approved:				Cost/Fee:		LOE:				
Work Assignment Manager Name Scott Palmer						Branch/Mail Code:				
						Phone Number 703-308-8621				
_____ (Signature) (Date)						FAX Number:				
Project Officer Name Shannon Sturgeon						Branch/Mail Code:				
						Phone Number: 703-605-0509				
_____ (Signature) (Date)						FAX Number: 703-308-7903				
Other Agency Official Name						Branch/Mail Code:				
						Phone Number:				
_____ (Signature) (Date)						FAX Number:				
Contracting Official Name Eulvid Rocque						Branch/Mail Code:				
						Phone Number: 202-564-8316				
_____ (Signature) (Date)						FAX Number:				

Statement of Work
Work Assignment No. 1-15
EPA Contract #: EP-W-12-013
Amendment – March 2014

1. **Title:** Economic Benefits of RCRA Regulatory & Voluntary Programs

2. **Period of Performance:** Date of CO signature through 12/31/2014

3. **Work Assignment Manager:** **Scott Palmer**
Economics and Risk Analysis Staff
Office of Resource Conservation and

Recovery

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4. **Background and Scope:**

The Office of Resource Conservation and Recovery (ORCR) is responsible for administering and tracking the performance of numerous voluntary initiatives and regulatory programs under its authority. Such programs are primarily focused on the proper management and disposal of both municipal and hazardous waste. ORCR routinely conducts program impact evaluations and benefit assessments for components of its overall program when feasible. However, the current effort seeks to produce a more succinct compilation of these program characteristics and impacts. In doing so, the requested analyses are intended to generate more defensible findings, while also covering the entire ORCR/RCRA program, so that this information will be more readily available for a wide array of uses both internal and external to the Agency.

To meet this objective, ORCR currently has a Work Assignment (WA # 1-15) in place that calls for necessary analyses to characterize the size, reach, and beneficial impacts associated with ORCR/RCRA Program(s) (in terms of, for example, waste stream types and quantities, numbers of cleanups completed at corrective action sites, population within 1 mile of sites, etc.). During the initial phase of this work, the aim has been to help better portrait the full breadth and extent of the program. These analyses are intended to put a solid foundation in place, and help produce key inputs necessary, for further higher level analyses. In this vein, WA #1-15 also calls for additional levels of analysis, to investigate and utilize relevant available data and predictive modeling tools to highlight qualitative and quantitative program-wide impacts and benefit estimates where feasible.

As noted in the original Scope of Work (SOW) for WA # 1-15, this type of analyses occurs on an ongoing basis and some significant work has already been conducted in this area. This body of prior work is currently being reviewed and utilized where appropriate in the analyses and work products now underway for WA # 1-15. [Note: More information on prior relevant analyses in this area is referenced in the original SOW and associated deliverables for WA #1-5.]

Under the approved Work Plan for WA # 1-15, there are 4 Tasks including: 1) Work Plan and Budget Management; 2) Scoping Assessment of Economic Benefits of ORCR Programs; 3) Estimation of Quantifiable Benefits of the ORCR Programs; and 4) Development of Outreach Materials Highlighting the Benefits of the ORCR Program. To achieve these tasks, the work plan included the development of a plan/outline aimed at flushing out the analyses and vehicles by which we would accomplish the overall objectives of the work assignment. The resulting plan, known as the “Quantitative RCRA Benefits Assessment – Annotated Outline (dated Jan. 6, 2014), includes recommendations for how to best capture, characterize, and advertize the benefits that jointly stem from our programs. This plan clearly outlines necessary steps forward to achieve our objectives and has been closely relied upon for determining what analyses are most appropriate for the project.

At the request of the OSWER Assistant Administrator, ORCR is under a very tight timeline and is expected to complete these subject analyses as soon as possible. These analyses are therefore proceeding very quickly, and roughly 90% of the approved work has been completed in only a few short months. More specifically, a major portion of the data collection, analyses, and associated documentation called for in Phases 1 and 2 of the Jan. 6th Plan (per Task 2 of WA #1-15) has been finished. In addition, a bulk of the analyses and deliverables approved under Task 3 of WA #1-15 are nearly complete. Task 4 calls for the development of “Outreach Materials Highlighting the Benefits of the ORCR Program”. As such, Task 4 is still underway, and these materials will not be finalized until more results from ongoing and future analyses are available.

The purpose of this Amendment to WA #1-15 is to request further analyses from the contractor. EPA wishes to dedicate additional funds to this project in order to expand upon the work already conducted to date under WA #1-15. The following Section 5 covers the State of Work for Amendment #1. Task 1 of the scope simply calls for the submission of the necessary work plan and proposed budget by the contractor. Tasks 2 then outline the additional analyses that are being requested under this amendment.

5. Statement of Work: The contractor shall conduct the following tasks:

Task 1: Work Plan and Budget Management

Within 20 calendar days of the receipt of the approved work assignment, the contractor shall deliver a work plan including a proposed level of effort by subtask, budget, and schedule of tasks through the term of performance. If there are any questions regarding the work plan, please contact the EPA WAM. The contractor shall maintain at least weekly communication with the EPA WAM of any anticipated events which may cause an accelerated expenditure of approved funds for the period, and provide a monthly progress report regarding the status of work on the work assignment. The contractor shall also provide management oversight of the work assignment throughout its entire period of performance.

In addition, the contractor shall provide a brief description (a sentence or two) in the monthly progress reports of the data-quality issues and activities met throughout the work assignment.

Task 2: Expanded Analyses Requested in Relation to Analyses Conducted to Date

Requested first under Task 2, is an update of the existing project plan/outline incorporating the steps and turnaround time associated with the expanded analyses that will be conducted under this Amendment (both for Task 2 and Task 3 below). Then, proposed analyses which expand upon the existing analyses shall include the use of readily available data and methods which were identified during the performance of analyses conducted to date under Phases 1 & 2 of the Project Plan/Outline. Specific examples of “expanded analyses” shall include for example:

- 1) The utilization of new methods/tools for pulling data from the EPA Biennial Report, which will then be used for improved characterization of specific features of hazardous waste generation and management practices within the US.
- 2) The utilization of the above BR data in analyses aimed at identifying significant changes and trends relative to targeted waste categories, management practices, and process technologies.
- 3) The utilization of data from Phase 1, to conduct targeted special analyses of potential interest.

Deliverables for Task 2:

The contractor shall produce three deliverables for Task 2. Deliverable 2A shall be a draft update of the existing plan/outline generated from the scoping assessment conducted for the Original SOW for WA # 1-15. Deliverable 2B shall be a Draft Report on the findings of the expanded analyses conducted for this Task. Deliverable 2C calls for the draft report of results to be finalized and also incorporated into any broader project documents associated with the overall project. [Note: See also the Schedule for Deliverables under Section 6 below.]

6: Overall Schedule for Deliverables

Task and Deliverable	Estimated Delivery
Task 1: Workplan and Budget Management Deliverable 1: Workplan and Budget	20 days after receipt of the approved work assignment.
Task 2: Additional Analyses Requested in Relation to Analyses Conducted to Date Deliverable 2A: Update Existing Project Plan/Outline (to include articulation of steps involved with all additional analyses to be conducted for both Tasks 2 & 3) Deliverable 2B: Draft Results of Expanded Analyses Deliverable 2C: Final Report of Task 2 Results and Incorporation of results into Overall Documentation of WA #1-15 Results	1 week after CO signature 3 weeks after WAM comments on Deliverable 2A 2 weeks after WAM comments on Deliverable 2B

7.) OTHER CONTRACTOR REQUIREMENTS

The contractor shall comply with all applicable requirements of the contract, including compliance with quality-assurance requirements, providing monthly invoices detailing progress and notifying the WAM of the status of remaining funds, and other requirements. The contractor must also ensure that the data collected for the characterization of environmental processes and conditions contain the appropriate QA/QC requirements to support the intended use of the data. In addition to the contract requirements for QA, documents that can be of use in developing the appropriate QA/QC requirements are: *Guidance for Data Quality Objectives* (EPA QA/G-4), and *Guidance for Quality Assurance Project Plans* (EPA QA/G-5). These documents and others can be found at the following Agency website: <http://www.epa.gov/quality/qs-docs/>.

All hard copy and electronic data collected for the purposes of analyses under WA # 1-15 and this subject Amendment (other than that data which is publically available) shall be shared with EPA. Similarly, any algorithms, electronic spreadsheets, and/or modeling tools generated by the contractor, for the purposes of analyses conducted to meet the SOW for WA # 1-15 and this subject Amendment, shall be shared with EPA.

Work Assignment Form, (WebForms v1.0)

EPA United States Environmental Protection Agency Washington, DC 20460 Work Assignment						Work Assignment Number 1-15				
						<input type="checkbox"/> Other <input checked="" type="checkbox"/> Amendment Number: 000004				
Contract Number EP-W-12-013			Contract Period 04/30/2012 To 04/29/2014 Base Option Period Number 1			Title of Work Assignment/SF Site Name Economic Benefits of RCRA				
Contractor INDUSTRIAL ECONOMICS, INCORPORATED					Specify Section and paragraph of Contract SOW NA					
Purpose: <input type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input checked="" type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval						Period of Performance From 04/27/2013 To 04/29/2014				
Comments: The purpose of this amendment is to approve the contractor's work plan/cost estimate dated 03/24/2014 with a LOE of 153 hours and \$14,920.76 (b)(4) cost (b)(4) fee). The total ceiling is as follows: LOE 831 hours and \$66,807.83 (b)(4) cost (b)(4) fee). The contractor is not allowed to go over the cost ceiling without approval from the contracting officer.										
<input type="checkbox"/> Superfund Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund										
Note: To report additional accounting and appropriations data use EPA Form 1900-69A.										
SFO 22 (Max 2)										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:		LOE: 678						
04/30/2012 To 04/29/2014										
This Action:				153						
Total:				831						
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:			LOE:			
Cumulative Approved:				Cost/Fee:			LOE:			
Work Assignment Manager Name Scott Palmer							Branch/Mail Code:			
_____ (Signature) (Date)							Phone Number 703-308-8621			
							FAX Number:			
Project Officer Name Shannon Sturgeon							Branch/Mail Code:			
_____ (Signature) (Date)							Phone Number: 703-605-0509			
							FAX Number: 703-308-7903			
Other Agency Official Name							Branch/Mail Code:			
_____ (Signature) (Date)							Phone Number:			
							FAX Number:			
Contracting Official Name Eulvid Rocque							Branch/Mail Code:			
_____ (Signature) (Date)							Phone Number: 202-564-8316			
							FAX Number:			

EPA United States Environmental Protection Agency Washington, DC 20460 Work Assignment						Work Assignment Number 1-17				
						<input type="checkbox"/> Other <input type="checkbox"/> Amendment Number:				
Contract Number EP-W-12-013			Contract Period 04/30/2012 To 04/29/2014 Base Option Period Number 1			Title of Work Assignment/SF Site Name e-Manifest second-year rulema				
Contractor INDUSTRIAL ECONOMICS, INCORPORATED					Specify Section and paragraph of Contract SOW					
Purpose: <input checked="" type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval						Period of Performance From 04/30/2013 To 04/29/2014				
Comments: This action initiates WA 1-17, titled "Economic Support for EPA's e-Manifest second-year rulemaking" with an LOE of 568 hours. Chris McMinimy is the WAM. The State of Work (SOW) is attached. The contractor shall submit a work plan/cost estimate.										
<input type="checkbox"/> Superfund Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund										
Note: To report additional accounting and appropriations data use EPA Form 1900-69A.										
SFO 22 (Max 2)										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:		LOE:						
04/30/2012 To 04/29/2014				0						
This Action:				568						
Total:				568						
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:		LOE:				
Cumulative Approved:				Cost/Fee:		LOE:				
Work Assignment Manager Name Chris McMinimy <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>						Branch/Mail Code: Phone Number 703-308-0105 FAX Number:				
Project Officer Name Shannon Sturgeon <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>						Branch/Mail Code: Phone Number: 703-605-0509 FAX Number: 703-308-7903				
Other Agency Official Name Chris McMinimy <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>						Branch/Mail Code: Phone Number: 703-308-0105 FAX Number:				
Contracting Official Name Eulvid Rocque <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>						Branch/Mail Code: Phone Number: 202-564-8316 FAX Number:				

Statement of Work

12 December, 2013

Project Title: Economic Support for EPA's e-Manifest second-year rulemaking
Contract No.: EP-W-12-013
Work Assignment No.: 1-17
Works Assignment Manager (COTR): Chris McMinimy, Economist
EPA Office of Resource Conservation & Recovery (ORCR)
703-308-0105
Alt COTR: Mark Eads, Economist
EPA Office of Resource Conservation & Recovery (ORCR)
703-308-8615
Period of Performance: CO signature through April 29, 2014.

I. Introduction

EPA is beginning work on a second e-Manifest rulemaking. The first rulemaking, referred to hereafter as the first-year rule, declares that electronic hazardous waste manifests are the legal equivalent of the existing paper manifests. It declares that these "e-manifests" may be submitted to EPA in lieu of paper manifests once an electronic system to collect, process and distribute them, aka "e-Manifest," has been built and turned on. The first-year rule declares EPA's intention to build an EPA-hosted and centralized e-Manifest system. Lastly, the first rule discusses issues relating to hazardous-waste-manifest data public access and electronic signature verification.

EPA's second rulemaking, referred to hereafter as the second-year rule, will determine the fees to be charged for use of the system and publish the date upon which the system will go live. This rulemaking will require economic support in three areas:

1. Gathering information on business activity and practices within the hazardous waste generation, shipping, and TSFD sectors specific to the needs of this rule. This body of knowledge will help EPA estimate the costs and benefits of e-Manifest and will also help EPA determine the appropriate e-Manifest fees. Most importantly, EPA must estimate the annual volume of electronic hazardous waste manifests that will be processed by the e-Manifest system within its first several years of operation.
2. Developing a methodology to calculate e-manifest user fees. This methodology will incorporate variables such as: e-Manifest acquisition costs, e-Manifest program costs, the number of years over which the e-Manifest system costs are to be recovered, yearly volume of manifest processed by e-Manifest, the interest rate, manifest complexity, etc. EPA will begin this work by surveying federal fees already in existence.
3. Producing a regulatory impact analysis (RIA) to accompany the second-year e-Manifest rulemaking. This RIA will estimate the costs and benefits of the e-Manifest system upon the affected universe of industrial entities, state governments, and federal agencies.

II. Purpose and Scope of this Work Assignment

The purpose of this Work Assignment (WA) is to provide support for ORCR/ERAS' work in the economic support areas described above.

The scope of this WA includes: industry question development; federal fee literature review.; and any additional work that may be added to the WA as amended by the WAM.

Finally, this WA includes the preparation of emergency turnaround assessments, general supporting materials, briefings, general project coordination, and ongoing communication/outreach to the WAM/TOCOR.

III. Work Statement

Task 1. Work Plan, Progress Reports and Budget

Within twenty (20) days of receipt of this work assignment, the contractor shall deliver a work plan. This plan shall include a proposed level of effort, budget, schedule of tasks, and schedule of deliverables. A cost proposal shall accompany this work plan.

All data collection, assessment, and quality issues associated with this Work Assignment shall adhere to EPA data quality guidance and requirements, as established in EPA Order 5360.1A2, EPA Manual 5360.A1, and OSWER's and ORCR's Quality Management Plans. See: http://www.epa.gov/quality/qa_docs.html

As part of the monthly progress reports for this Work Assignment, the Contractor shall provide a summary of all data collection and quality control activities conducted during each month.

No confidential business information (CBI) shall be collected or used under this Work Assignment. However, proprietary data may be used following written approval from the WAM/TOCOR.

Contractor travel is authorized under this Work Assignment. The contractor shall budget for no more than one overnight trip for two or less persons, round trip from Cambridge/Boston, MA to Arlington, VA/Washington, D.C.

Deliverable(s) and Schedule:

Work Plan and Budget within allotted time frame identified above.

Task 2: **Programmatic Support**

The contractor shall provide programmatic support in the area of short-term or quick turnaround technical assistance, analysis, and supporting documents to ORCR for the “**e-Manifest second-year proposed rule,**” and related work.

Under this task the contractor shall develop and submit various general support documents and analyses directly or indirectly related to the proposed rule. Examples of such documents/analyses may include, but not be limited to:

- cost or cost savings summary tables addressing impacts of one or more of the regulatory improvement areas;
- briefing packages;
- fact sheets, flow charts, or presentation graphics;

The need for and number of such documents is uncertain at the time of this work assignment. The WAM will provide a Technical Directive (TD) designed to clarify the need and scope of such document(s), as necessary. The contractor shall budget for approximately three (3) TDs under this Task.

Deliverable(s) and Schedule:

DELIVERABLES	DUE DATES
Development of quick-turnaround support documents and analyses related to the rule: To be defined in each TD (e.g., briefing package, fact sheet)	<u>Draft</u> : Five (5) Agency working days from contractor receipt of TD, and all supporting information. <u>Final</u> : Five (5) Agency working days from contractor receipt of all written WAM comments on the draft.

Task 3: **Assistance with Industry Questions**

Subtask A:

Under this subtask the contractor shall help EPA craft questions to be presented to 9 or fewer major hazardous waste TSDf corporations. Questions shall be formulated with the following requirements in mind:

- 1) The contractor shall work off a list of draft questions provided by EPA at the beginning of the project.
- 2) The contractor shall consult with EPA to determine information needs for the various aspects of the e-Manifest second-year rulemaking and then refine and/or expand the list of questions as appropriate. The contractor should plan for one conference call at the inauguration of this task to discuss ORCR/PIID's and ORCR/ERAS' information needs.

3) The contractor shall formulate questions to maximize the number of responses received.

4) The contractor shall ensure that the questions are written precisely and clearly so that respondents will provide standardized, comparable responses and to minimize the response time and burden borne by respondents. For example, some responses will need to be summed to then serve as inputs for mathematical formulas.

Subtask B:

Under this subtask the contractor shall receive, organize, and present the responses to the questions devised in subtask 3A above. Responses shall be presented in a document with tables and accompanied by summary statistics and other formulations as directed by the WAM. These shall be presented in a document which will be included as an appendix to the RIA for this rulemaking or as a stand-alone submission to the docket for this rulemaking. The contractor shall also present EPA with a document containing the complete set of answers to each question.

Deliverable(s) and Schedule:

Draft and final deliverables shall be presented in response to the industry question development requirements in subtasks A&B, and any Technical Directive. The first set of deliverables shall be in memo format, presenting a clear description of, and justification for each question and in the case of subtask B the methods used to present and organize responses. Tables, charts, and graphics shall be incorporated, as appropriate for both sets of deliverables, to enhance and clarify the presentation

DELIVERABLES	DUE DATES
A) Industry Question Development	<p><u>Draft Questions:</u> Questions within fifteen (15) Agency working days following contractor receipt of draft questions and the conclusion in the PIID/ERAS information needs meeting.</p> <p><u>Final Questions:</u> Ten (10) Agency working days following contractor receipt of all WAM written comments on the draft.</p>
B) Response Document	<p><u>Draft Document:</u> No later than fifteen (15) Agency working days following receipt of responses from all respondents or ten (10) Agency working days after questions have been circulated for twenty five (25) Agency working days.</p> <p><u>Final Document:</u> No later than ten (10) Agency working days following contractor receipt of all written WAM comments on the draft.</p>

Task 4: **Methodology for establishing e-Manifest Fees**

Under this task the contractor shall assist EPA in developing a methodology to calculate e-Manifest user fees.

The subtasks A through C comprise the initial work for this task. The scope of this task will expand as the rule writing and acquisition components of the e-Manifest project advance. These components will provide necessary inputs for work within this task. The scope of work under this task shall be expanded by amendments to the initial work assignment. EPA expects the contractor will eventually produce a methodology to calculate fees for the e-Manifest system and a support document to defend the methodology.

Subtask A:

Under this subtask the contractor shall compile a list of as many existing federal fee-for-service programs as they can identify. The contractor shall also identify a subset of fees and pay-for-service programs with goals, operating environments, or structures similar to e-Manifest. This subset of fees and pay-for-service programs shall be examined in depth by the contractor in

Subtask B:

Under this subtask the contractor shall gather information on each of the fees and pay-for-service programs identified as pertinent to e-Manifest in *Subtask A*. As the contractor reviews each user fee, they shall record the following:

- The fee schedule,
- The “success” of the fee in meeting the programs needs,
- The program aspects covered by the fee,
- The formulas, methodologies, inputs, and variables used to calculate the fee,
- Any assumptions made to calculate or justify the fee,
- The complexity of the fee (i.e. are different fees charged to different entities etc.),
- Any advantages or disadvantages of each fee-calculating methodology,
- The applicability of each fee-calculating methodology to e-Manifest,
- Any other relevant information per the WAM’s Technical Direction or the contractor’s expertise.

Once the contractor has completed their fee review, they shall write up the results of their review in a document entitled: “Assessment of Methodology most Appropriate to Establish Initial e-Manifest User Fees.” This document shall be the deliverable for this subtask. It shall be written such that it can be inserted into a broader work as a background or introductory chapter. The contractor shall include a summary of key findings, followed by a description of each fee reviewed. This description shall include all of the bulleted information collected under *Subtask A*.

Deliverable(s) and Schedule:

The deliverables for this task shall consist of the list of federal fees and pay-for-service programs described in *Subtask A* as well as the results document described in *Subtask B*. Tables, charts, and graphics shall be included, as appropriate, to ensure clarity and ease of understanding.

DELIVERABLES	DUE DATES
A) List of Federal Fees and Pay-for-Service Programs	<p><u>Draft List:</u> List within thirty (30) Agency working days following contractor receipt of this signed work assignment.</p> <p><u>Final List:</u> Ten (10) Agency working days following contractor receipt of all WAM written comments on the draft.</p>
B) Results Document	<p><u>Draft Document:</u> No later than sixty (60) Agency working days following approval by the WAM of the final list from Subtask A.</p> <p><u>Final Document:</u> No later than twenty (20) Agency working days following contractor receipt of all written WAM comments on the draft.</p>

Task 5: Economic Assessment Document

Under this task the contractor shall assist EPA in development of a Regulatory Impact Analysis (RIA) for the e-Manifest rulemaking. When complete, the RIA shall include a baseline estimate of the affected entities and number of manifests generated annually, an estimate of the costs and benefits of the e-Manifest system, a cost-benefit analysis, and all relevant analyses required by statute and relevant executive orders. The RIA shall be based on an ERAS-Internal draft RIA.

The scope of this task will expand as the rule writing and acquisition components of the e-Manifest project advance. These components will provide necessary inputs for work within this task. The scope of work under this task shall be expanded by amendments to the initial work assignment. The initial scope of work is limited to updating baseline figures in the RIA as described in *Subtask A* below. EPA expects that the contractor will eventually produce a complete draft RIA document under this task.

Subtask A:

Under this subtask the contractor shall update the baseline count of affected entities found in Chapter 2 of the draft RIA. The contractor shall use the same data sources and methodologies found in the draft RIA, except for the count of state governments that

collect manifests, Chapter 2 section 2 where the contractor shall look for other sources of information.

Deliverable(s) and Schedule:

Deliverables for this task shall consist initially of the updated Chapter 2 of the draft-internal RIA. The draft deliverable shall be due five (5) agency working days following contractor receipt of this signed work assignment, the final due five (5) days following contractor receipt of all agency comments on the draft.

Deliverables and due dates for future subtasks not included in the initial work assignment will be amended into the work assignment.

DELIVERABLES	DUE DATES
A) Affected Entities Update	<u>Draft Update:</u> Ten (10) working days following satisfactory completion of all work under subtasks A and B. <u>Final Update:</u> Ten (10) Agency working days following contractor receipt of all written comments on the draft.

Summary of Deliverables and Schedule		
<i>Task and Deliverable(s)</i>	<i>Draft</i>	<i>Final</i>
Task 1: <u>Work Plan, Progress Reports and Budget</u>		
Initial Work Plan and Budget	As required by Contract.	As required by Contract.
Task 2: <u>Programmatic Support</u>		
Development of quick-turnaround support documents and analyses related to the rule: To be defined in each TD (e.g., briefing package, fact sheet)	Draft: Five (5) Agency working days from receipt of TD and all supporting information.	<u>Final</u> : Ten (10) Agency working days from receipt of all written WAM comments on draft.
Task 3: <u>Assistance with Industry Questions</u>		
A) Industry Question Development	<u>Draft Questions</u> : Questions within fifteen (15) Agency working days following contractor receipt of draft questions and the conclusion in the PIID/ERAS information needs meeting.	<u>Final Questions</u> : Ten (10) Agency working days following contractor receipt of all WAM written comments on the draft.
B) Response Document	<u>Draft Document</u> : No later than fifteen (15) Agency working days following receipt of responses from all respondents or ten (10) Agency working days after questions have been circulated for twenty five (25) Agency working days	<u>Final Document</u> : No later than ten (10) Agency working days following contractor receipt of all written WAM comments on the draft.
Task 4: <u>e-Manifest Fee Methodology</u>		
A) List of Federal Fees and Pay-for-Service Programs	<u>Draft List</u> : List within thirty (30) Agency working days following contractor receipt of this signed work assignment.	<u>Final List</u> : Ten (10) Agency working days following contractor receipt of all WAM written comments on the draft.
B) Results Document	<u>Draft Document</u> : No later than sixty (60) Agency working days following approval by the WAM of the final list from Subtask A.	<u>Final Document</u> : No later than twenty (20) Agency working days following contractor receipt of all written WAM comments on the draft.
Task 5: <u>Economic Assessment Document</u>		
Sub-Task A: Economic Assessment Document Universe Update	<u>Draft Update</u> : Ten (10) working days following satisfactory completion of all work under Subtasks A and B.	<u>Final Update</u> : Ten (10) Agency working days following contractor receipt of all written comments on the draft.

WORK ASSIGNMENT ADDITIONAL REQUIREMENTS OFFICE OF RESOURCE CONSERVATION AND RECOVERY

The following additional terms and conditions are requirements of this task order:

TECHNICAL DIRECTION

In accordance with EPAAR 1552.237-71–*Technical Direction*, the WAM will provide Technical Direction during performance of this Work Assignment. Technical direction includes:

1. Instruction to the contractor that approves approaches, solutions, designs, or refinements; fills in details; completes the general description of work; shifts emphasis among work areas or tasks; and
2. Evaluation and acceptance of reports or other deliverables.

Technical Direction must be within the scope of the contract-level SOW. The WAM does not have the authority to issue Technical Direction which:

1. Requires additional work outside the scope of the contract or Work Assignment;
2. Constitutes a change as defined in the "Changes" clause;
3. Causes an increase or decrease in the estimated cost of the contract or Work Assignment;
4. Alters the period of performance of the contract or Work Assignment; or
5. Changes any of the other express terms or conditions of the contract or Work Assignment.

Technical Direction will be issued in writing by the WAM, or confirmed by the WAM in writing within five (5) calendar days after oral issuance, if oral instruction provided.

QUALITY ASSURANCE

Performance under this Work Assignment requires the contractor to prepare a Quality Assurance Project Plan (QAPP) to be included as part of the Work Assignment. The contractor shall submit a QAPP with its Work Plan in accordance with *EPA Requirements for Quality Assurance Project Plans (QA/R-5)* found here: <http://www.epa.gov/QUALITY/qs-docs/r5-final.pdf>. The contractor's QAPP must be approved by the WAM and Quality Assurance Manager before Work Plan approval. Following approval of the contractor's QAPP, the contractor shall perform all tasks under this Work Assignment in accordance with the quality standards established in the QAPP.

SURVEY MANAGEMENT

Performance under this Work Assignment may require the contractor to create statistical surveys, perform data collection, use questionnaires, or perform statistical analysis of survey data. The contractor shall perform these tasks in accordance with the *EPA Survey Management Handbook* found here: <http://www.epa.gov/oamcinc1/0710295/attach12.pdf>.

COMMUNICATIONS PRODUCTS

Performance under this Work Assignment may require the contractor to develop deliverables that are considered by EPA to be "Communications Products." If relevant, the contractor shall develop

Communications Products in accordance with *EPA's Policy and Implementation Guide for Communications Product Development and Approval* found here: <http://www.epa.gov/productreview/guide/index.html>. Additionally, if Communications Products require the use of EPA graphics, logos, or other identifiable materials, the Communications Products are further subject to the standards in *EPA's Visual and Product Standards Graphics Manual* found here: <http://wedcor.cor.epa.gov/pages/TIM/VisualIdentity-6-19-07.pdf>.

EPA United States Environmental Protection Agency Washington, DC 20460 Work Assignment						Work Assignment Number 1-17				
						<input type="checkbox"/> Other <input checked="" type="checkbox"/> Amendment Number: 000001				
Contract Number EP-W-12-013			Contract Period 04/30/2012 To 04/29/2014			Title of Work Assignment/SF Site Name				
			Base Option Period Number 1			Economic Support: e-Manifest				
Contractor INDUSTRIAL ECONOMICS, INCORPORATED					Specify Section and paragraph of Contract SOW					
Purpose: <input type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input checked="" type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval					Period of Performance From 04/30/2012 To 04/29/2014					
Comments: The purpose of this amendment is to approve the contractor's work plan/cost estimate dated 02/07/2014 with an LOE of 568 hours and \$56,651.92 (b)(4) cost (b)(4) fee). This amendment also appoints Mark Eads as the alternate WAM.										
<input type="checkbox"/> Superfund Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund										
Note: To report additional accounting and appropriations data use EPA Form 1900-69A.										
SFO (Max 2) 22										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:		LOE:						
04/30/2012 To 04/29/2014				568						
This Action:				0						
Total:				568						
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:		LOE:				
Cumulative Approved:				Cost/Fee:		LOE:				
Work Assignment Manager Name Chris McMinimy						Branch/Mail Code:				
						Phone Number 703-308-0105				
_____ (Signature) (Date)						FAX Number:				
Project Officer Name Shannon Sturgeon						Branch/Mail Code:				
						Phone Number: 703-605-0509				
_____ (Signature) (Date)						FAX Number: 703-308-7903				
Other Agency Official Name						Branch/Mail Code:				
						Phone Number:				
_____ (Signature) (Date)						FAX Number:				
Contracting Official Name Eulvid Rocque						Branch/Mail Code:				
						Phone Number: 202-564-8316				
_____ (Signature) (Date)						FAX Number:				

EPA United States Environmental Protection Agency Washington, DC 20460 Work Assignment						Work Assignment Number 1-17				
						<input type="checkbox"/> Other <input checked="" type="checkbox"/> Amendment Number: 000002				
Contract Number EP-W-12-013			Contract Period 04/30/2012 To 04/29/2014			Title of Work Assignment/SF Site Name				
			Base Option Period Number 1			e-Manifest rulemaking				
Contractor INDUSTRIAL ECONOMICS, INCORPORATED					Specify Section and paragraph of Contract SOW					
Purpose: <input type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input checked="" type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval					Period of Performance From 04/30/2012 To 04/29/2014					
Comments: The purpose of this amendment is to de-scope/reduce originally approved LOE of 568 for WA 1-17 by 257 hours. New total LOE for this WA is 311 hours. Revised Statement of Work, (SOW) removes 2 TDs and Tasks 3 and 5 from this WA. The contractor is to submit a revise work plan and cost estimate.										
<input type="checkbox"/> Superfund Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund										
Note: To report additional accounting and appropriations date use EPA Form 1900-69A.										
SFO 22 (Max 2)										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:				LOE: 568				
04/30/2012 To 04/29/2014										
This Action:						-257				
Total:						311				
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:		LOE:				
Cumulative Approved:				Cost/Fee:		LOE:				
Work Assignment Manager Name Chris McMinimy						Branch/Mail Code:				
_____ (Signature) (Date)						Phone Number 703-308-0105				
						FAX Number:				
Project Officer Name Shannon Sturgeon						Branch/Mail Code:				
_____ (Signature) (Date)						Phone Number: 703-605-0509				
						FAX Number: 703-308-7903				
Other Agency Official Name						Branch/Mail Code:				
_____ (Signature) (Date)						Phone Number:				
						FAX Number:				
Contracting Official Name Eulvid Rocque						Branch/Mail Code:				
_____ (Signature) (Date)						Phone Number: 202-564-8316				
						FAX Number:				

Statement of Work

6 March, 2013

Project Title: Economic Support for EPA's e-Manifest second-year rulemaking
Contract No.: EP-W-12-013
Work Assignment No.: 1-17
Works Assignment Manager (COTR): Chris McMinimy, Economist
EPA Office of Resource Conservation & Recovery (ORCR)
703-308-0105
Alt COTR: Mark Eads, Economist
EPA Office of Resource Conservation & Recovery (ORCR)
703-308-8615
Period of Performance: CO signature through April 29, 2014.

The purpose of this Statement of Work is to de-scope the 1-17 work assignment. This de-scope will affect Tasks 2,3, and 5.

I. Reduce the scope of Task 2 from three (3) Technical Directives to one (1) Technical Directive

Task 2: Programmatic Support

The contractor shall provide programmatic support in the area of short-term or quick turnaround technical assistance, analysis, and supporting documents to ORCR for the “**e-Manifest second-year proposed rule,**” and related work.

Under this task the contractor shall develop and submit various general support documents and analyses directly or indirectly related to the proposed rule. Examples of such documents/analyses may include, but not be limited to:

- cost or cost savings summary tables addressing impacts of one or more of the regulatory improvement areas;
- briefing packages;
- fact sheets, flow charts, or presentation graphics;

The need for and number of such documents is uncertain at the time of this work assignment. The WAM will provide a Technical Directive (TD) designed to clarify the need and scope of such document(s), as necessary. The contractor shall budget for one (1) TD under this Task.

Deliverable(s) and Schedule:

DELIVERABLES	DUE DATES
Development of quick-turnaround support documents and analyses related to the rule: To be defined in each TD (e.g., briefing package, fact sheet)	<u>Draft</u> : Five (5) Agency working days from contractor receipt of TD, and all supporting information. <u>Final</u> : Five (5) Agency working days from contractor receipt of all written WAM comments on the draft.

II. Remove Task 3 from the work assignment.**Task 3:** **Assistance with Industry Questions****Subtask A:**

Under this subtask the contractor shall help EPA craft questions to be presented to 9 or fewer major hazardous waste TSDf corporations. Questions shall be formulated with the following requirements in mind:

- 1) The contractor shall work off a list of draft questions provided by EPA at the beginning of the project.
- 2) The contractor shall consult with EPA to determine information needs for the various aspects of the e-Manifest second-year rulemaking and then refine and/or expand the list of questions as appropriate. The contractor should plan for one conference call at the inauguration of this task to discuss ORCR/PIID's and ORCR/ERAS' information needs.
- 3) The contractor shall formulate questions to maximize the number of responses received.
- 4) The contractor shall ensure that the questions are written precisely and clearly so that respondents will provide standardized, comparable responses and to minimize the response time and burden borne by respondents. For example, some responses will need to be summed to then serve as inputs for mathematical formulas.

Subtask B:

Under this subtask the contractor shall receive, organize, and present the responses to the questions devised in subtask 3A above. Responses shall be presented in a document with tables and accompanied by summary statistics and other formulations as directed by the WAM. These shall be presented in a document which will be included as an appendix to the RIA for this rulemaking or as a stand-alone submission to the docket for this rulemaking. The contractor shall also present EPA with a document containing the complete set of answers to each question.

III. Remove Task 5 from the work assignment.

Task 5: Economic Assessment Document

Under this task the contractor shall assist EPA in development of a Regulatory Impact Analysis (RIA) for the e-Manifest rulemaking. When complete, the RIA shall include a baseline estimate of the affected entities and number of manifests generated annually, an estimate of the costs and benefits of the e-Manifest system, a cost-benefit analysis, and all relevant analyses required by statute and relevant executive orders. The RIA shall be based on an ERAS-Internal draft RIA.

The scope of this task will expand as the rule writing and acquisition components of the e-Manifest project advance. These components will provide necessary inputs for work within this task. The scope of work under this task shall be expanded by amendments to the initial work assignment. The initial scope of work is limited to updating baseline figures in the RIA as described in *Subtask A* below. EPA expects that the contractor will eventually produce a complete draft RIA document under this task.

Subtask A:

Under this subtask the contractor shall update the baseline count of affected entities found in Chapter 2 of the draft RIA. The contractor shall use the same data sources and methodologies found in the draft RIA, except for the count of state governments that collect manifests, Chapter 2 section 2 where the contractor shall look for other sources of information.

EPA United States Environmental Protection Agency Washington, DC 20460 Work Assignment						Work Assignment Number 1-17				
						<input type="checkbox"/> Other <input checked="" type="checkbox"/> Amendment Number: 000003				
Contract Number EP-W-12-013			Contract Period 04/30/2012 To 04/29/2015 Base Option Period Number 1			Title of Work Assignment/SF Site Name eManifest Second Year Rulemaki				
Contractor INDUSTRIAL ECONOMICS, INCORPORATED					Specify Section and paragraph of Contract SOW					
Purpose: <input type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input checked="" type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval						Period of Performance From 04/30/2012 To 04/29/2014				
Comments: The purpose of this amendment is to approve the contractor's work plan/cost estimate dated 3/24/14 with an LOE of 311 hours and \$28,340.79 [(b)(4)] cost [(b)(4)] fee). The contractor is not allowed to go over the approved cost ceiling without the approval from the Contracting Officer.										
<input type="checkbox"/> Superfund Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund										
Note: To report additional accounting and appropriations data use EPA Form 1900-69A.										
SFO 22 (Max 2)										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:				LOE: 311				
04/30/2012 To 04/29/2015										
This Action:						0				
Total:						311				
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:		LOE:				
Cumulative Approved:				Cost/Fee:		LOE:				
Work Assignment Manager Name Chris McMinimy						Branch/Mail Code:				
_____ (Signature) (Date)						Phone Number 703-308-0105				
						FAX Number:				
Project Officer Name Shannon Sturgeon						Branch/Mail Code:				
_____ (Signature) (Date)						Phone Number: 703-605-0509				
						FAX Number: 703-308-7903				
Other Agency Official Name						Branch/Mail Code:				
_____ (Signature) (Date)						Phone Number:				
						FAX Number:				
Contracting Official Name Eulvid Rocque						Branch/Mail Code:				
_____ (Signature) (Date)						Phone Number: 202-564-8316				
						FAX Number:				